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Aortic valve endocarditis by a rare infectious agent in a patient with a rare congenital mitral valve abnormality

João R. Agostinho *, Rui Plácido, Ana G. Almeida , and Fausto J. Pinto

Cardiology Department, Hospital de Santa Maria/CHULN, CAML, CCUL, Lisbon School of Medicine of the Universidade de Lisboa, Portugal, Av. Prof. Egas Moniz, Lisbon 1649-035, Portugal

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Case description

A 66-year-old woman with a past medical history of high blood pressure, Type 2 diabetes *mellitus* and no clinical evidence of immunocompromise, presented to the emergency room with fever and acute pulmonary oedema. The patient had presented low-grade fever and anorexia in the previous 3 weeks.

Transthoracic echocardiography showed severe aortic regurgitation related to the presence of large aortic vegetations affecting all cusps. Despite the stabilization of the patient after anti-congestive and vasodilator therapy, urgent surgery was considered given high embolic risk. Blood cultures were positive for penicillin-sensitive *Leuconostoc mesenteroides*.

Transoesophageal echocardiographic examination confirmed the presence of large vegetations attached to the aortic valve cusps with friable appearance and great mobility, prolapsing to the left ventricular outflow tract (*Figure 1*). It also revealed a double-orifice mitral valve, with a presence of a central bridge connecting the two leaflets (complete bridge type) and dividing the valve into two adequate orifices (medial and lateral) causing neither significant stenosis nor significant regurgitant associated jets (*Figures 1* and *2*).

The patient underwent aortic valve replacement and a biological prothesis was implanted.

With these images, the authors describe and illustrate a normally functioning double-orifice mitral valve associated with *L. mesenteroides* aortic valve infection an infrequent agent in humans and an extremely rare cause of endocarditis.

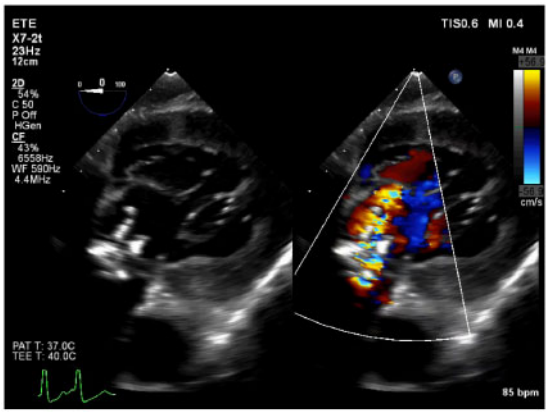

Figure 1 Transgastric views showing the presence of multiple vegetations and severe aortic regurgitation.

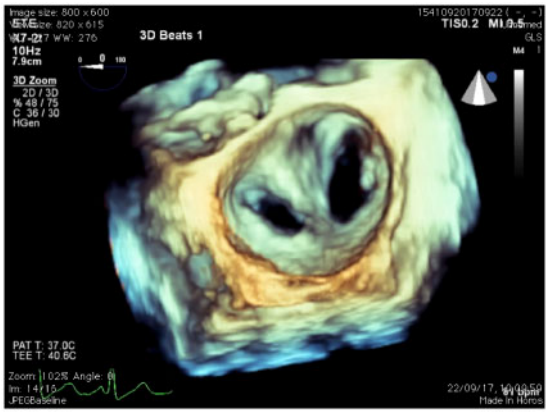

Figure 2 Double orifice mitral valve 3D reconstruction.

* Corresponding author. Tel: +351 914 651 723, Email: joaoragostinho@gmail.com
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Supplementary material

Supplementary material is available at *European Heart Journal - Case Reports* online.

Consent: The author/s confirm that written consent for submission and publication of this case report including image(s) and associated text has been obtained from the patient in line with COPE guidance.

Conflict of interest: none declared.